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Combating Underage Drinking

with the

60's

Time-pressed pediatricians have a new resource for surveying patients on the devastating problem of underage drinking.

BY RICHARD B. HEYMAN, MD

Alcohol kills more children and adolescents each year in the US than all other drugs combined. Some 5,000 young people are killed in this country annually due to car crashes involving a drunk driver, accidents or acts of violence while intoxicated, or alcohol poisoning. Among 15-24 year-olds, alcohol remains a leading factor in cases of death.

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While many pediatricians inquire about alcohol and other drug use when interviewing teenagers (although a 1995 study by the American Academy of Pediatrics [AAP] showed that number to be less than 50%) few introduce the topic before adolescence.¹ Clearly prevention is a crucial element in lowering the incidence of underage drinking and alcohol-related problems.

This article proposes a new and time-saving approach to guide pediatricians as they formulate office-based strategies aimed at the prevention and assessment of alcohol use, and education of patients and families about its dangers.

The internal effects

Alcohol use by children is especially dangerous for a number of reasons. Parts of the brain such as the



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limbic system (governing emotions) and the frontal cortex (essential for executive functions such as decision making, long-term planning and self-regulation) are still developing during adolescence, and are especially vulnerable to the effects of alcohol.

Studies of adolescent brains that have been repeatedly under the influence of alcohol show changes in myelination and synapse formation.² The disruption of these processes appears to be associated with delayed acquisition of cognitive skills, and the resultant risky decisions that are strongly influenced by peers and emotions. Recent research suggests that children and adolescents may have a lower level of response to alcohol, and thus require higher blood levels to become intoxicated. Furthermore, they may experience fewer side effects (hangover, loss of equilibrium, sedation, nausea), and thus be more likely to drink heavily.³

Children at risk

We know that temperament is a crucial factor in determining which children will choose to try alcohol. Aggressive versus passive temperament may lead to rebellious behavior, and those that are thrill-seekers versus those who are risk averse, are more prone to alcohol use.⁴ Clearly children with symptoms of depression, anxiety, and attention deficit hyperactivity disorder (ADHD) are more likely to try alcohol as well. Studies suggest that children with ADHD who are successfully treated, however, have a much lower likelihood of using alcohol and drugs.⁵ In addition, co-morbidity is the rule rather than the exception, so children with ADHD should be carefully screened for depression and anxiety.⁶

Family function/dysfunction creates additional risk factors for underage drinking. One out of four children grows up in a home with an alcoholic. The vast majority of these kids have adverse childhood experiences such as observing abuse, neglect, or witnessing domestic violence in the home.⁷ Such

SURVEY SAYS

Alcohol remains the drug of choice for adolescents, and is usually the first drug used on a regular basis. Surveys such as Monitoring the Future as well as the Youth Risk Behavior Survey consistently reveal that more children use alcohol than any other drug.¹ Prior to age 12, use is minimal, although some early users start by age 8. By eighth grade, some 17% of students drink regularly, and 10% admit to binge drinking (consumption of 5 or more drinks at a time, clearly with the intent to get drunk) on a regular basis. Those numbers increase dramatically with 32% of tenth graders describing themselves as frequent drinkers—with one in five binge drinking regularly. By twelfth grade, nearly 50% of students are drinking regularly. While in college, nearly a third of students report drinking patterns consistent with a diagnosis of alcohol abuse.²

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experiences have a strong influence on a young person's health, and directly impact the likelihood of teen pregnancy, smoking, alcohol and drug abuse, and risky sexual behavior. Indeed, there is a direct relationship between these adverse childhood experiences and the later likelihood of heart and lung disease, mental illness, suicide, and sexually transmitted diseases. Poverty, low educational status, latchkey time, and lack of family time are also drivers for underage drinking.⁸

Parenting style plays a crucial role in children's behavior and may influence their decision whether to consume alcohol. Parents who employ the so-called "authoritative" style (characterized by careful limit setting, and appropriate discipline/encouragement of the child's decision-making abilities) may create a family structure that predisposes a child to less alcohol use than those who use "authoritarian" (overly rigid and punitive), or "permissive" styles.

Community standards and involvement are factors which influence availability and use of alcohol by youth. Municipalities with active prevention and punitive policies generally experience lower rates of use. Rigorous policing of outdoor events that serve alcohol and careful monitoring of alcohol sales venues send a message that the community will not tolerate underage use, and availability of adequate recreational facilities may direct some youth in positive directions that do not predispose to underage drinking. Schools that provide a variety of extracurricular activities, encourage connectedness, and set clear and strict guidelines and penalties for use tend to have lower rates of alcohol and drug problems.

There is also a clear and consistent relationship between media exposure and the early onset of alcohol use. According to the Center on Alcohol Marketing and Youth, children who are exposed to the media on a regular basis view proportionally more alcohol advertisements than adults, and those with a favorite beer commercial are increasingly likely to drink at a young age.⁹ Beer commercials are cleverly constructed to appeal to the psyche of older children and adolescents, portraying beer drinkers as fun-loving, sexy, and successful. These ads further imply that alcohol use is risk free, solves prob-



lems, and that "everyone does it."¹⁰ This media portrayal of alcohol as a universal choice providing great pleasure with no consequences—as well as the billions of dollars spent by the alcoholic beverage industry—is a hard force to counter. Sadly, these strategies seem to be 'working'. Recent studies suggest that the alcoholic beverage industry makes anywhere from 40% to 60% of its profits from underage and abusive drinkers.¹¹

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Preventive measures

Looking at prevention and screening efforts, it is important to focus on the areas which seem to predict the likelihood of early experimentation with alcohol. Those children with a family history of alcohol abuse are clearly at an increased risk for early drinking.¹²

The peer group is consistently a leading factor in determining a young person's decision as to whether or not to try alcohol. Furthermore, studies repeatedly show that those who perceive that alcohol is "fairly easy" or "very easy" to obtain are more likely to drink.¹³ The fact that disapproval of drinking declines (from 83% in eighth grade to 65% in twelfth grade), and the perception that binge drinking represents a "great risk" declines (from 57% in eighth



Point Taken

There is a clear and consistent relationship between media exposure and the early onset of alcohol use.

grade to 45% in twelfth grade) while rates of use rise, also suggests that these are major factors.¹⁴ These aforementioned trends allow us to identify six major areas which clinicians must explore as they formulate a strategy to provide a prevention message, screen for underage alcohol use, and educate parents about underage drinking.

These areas can be conveniently remembered as "The 6Gs," and make up the basis of a brief semi-structured interview which, while not yet formally evaluated, has face

value validity based on the clinical data outlined in the paragraphs above.

It is important to note that although these content areas are relevant at all ages, a discussion of

THE EARLY BIRD STOPS DRINKING OF THE WORM

Given that children who drink frequently report that they began to drink by age 8 or 9, it is important for pediatricians to begin discussions of alcohol and drugs at an early age.

Questions such as:

Have you learned about alcohol and other drugs in school?

Do you know anyone who drinks more than they should?

Have you ever seen a person you thought was drunk?

Do you think you'll drink beer when you get older?

These questions can serve as an indicator of the child's knowledge about alcohol and drugs, and may serve as a springboard for discussion among parent, patient, and pediatrician. Any concerning answers can be noted and addressed at a future time, and may indicate the need for careful risk-behavior counseling.

Teenagers should be reminded repeatedly of societal expectations about underage drinking. Helping them understand the genetic basis for alcoholism may help them choose not to drink at an early age, especially if they have personal experience with living with an alcoholic. They can be encouraged to hang with youth who do not drink, and reminded of the consequences (physical, emotional, legal, trust, etc.) of associating with those who use. They can be reminded that, while a third of high school students do drink, two thirds choose not to do so. Lastly, pediatricians should encourage parents to make alcohol and drug prevention a major issue in the family and not leave the matter to schools—which historically have utilized programs that may be limited in their effectiveness.¹

General Accounting Office. Youth Illicit Drug Use Prevention: DARE Long-Term Evaluations and Federal Efforts to Identify Effective Programs, Jan 16, 2003. (GAO-03-172R)

the 6Gs

1. *genetics*: Genetic predisposition to alcoholism; family history of alcoholism; exposure to family drug and alcohol use
2. *group*: Nature of peer group, including its values, activities, levels of supervision
3. *give*: Perception of availability of alcohol, and likelihood of someone trying to give alcohol to the underage patient—at home, friends' houses, illegal sales, adults buying for youth
4. *get*: Willingness and temptation to seek and get alcohol and other drugs, and accept the associated risks; degree of disapproval of underage drinking
5. *great*: Recognition of the great dangers associated with underage alcohol and drug use—especially physical and mental health
6. *guidance*: Understanding of parental and societal guidance on this issue and understanding of social, family, school, and legal consequences

alcohol use should begin before middle or junior high school. Tobacco and drug use should also be included in this review.

HEADSS and Gs—Perfect together

The importance of performing a confidential psychosocial assessment on all adolescents can hardly be overemphasized. Goldenring developed a useful outline for this interview back in the '70s that has stood the test of time.¹⁵ The practicality of the so-called HEADSS schema (focusing on the assessment of the home, education, activities, drugs/alcohol/ tobacco, suicidality/depression, and sex) has been repeatedly reaffirmed. It is, in fact, a cornerstone of the adolescent interviewing process in the latest iteration of Bright Futures, the guideline for prevention services that is currently under development by the AAP and the Maternal and Child Health Bureau.

This mnemonic has found its way into medical records (both traditional and electronic) across the

country, and was recently expanded to HEEADSSS (to highlight the importance of eating and safety) by Goldenring and Rosen.¹⁶ Ginsburg recently adapted the mnemonic to SSHADESS (strengths, school, home, activities, drugs, emotions, sex, safety) to emphasize the importance of a strength-based approach.¹⁷

You might want to use the 6Gs as a complementary (and easy-to-remember) mnemonic during an evaluation of your patients for the “D” or “drugs/alcohol/tobacco” component of a HEADSS/HEEADSSS/SSHADESS assessment. If you suspect alcohol use, you can ask your patient the question directly: “How often do you drink?” or “How many beers does it take to give you a buzz?,” which is an approach that may yield important information or be met with resistance. A more detailed screening should then be conducted using the 6Gs. Although you may want to vary the phrasing of the questions, the content areas remain the same (see page XX).

the 6gs

APPLYING THE 6GS WITHIN A DRUGS/ALCOHOL/TOBACCO ASSESSMENT



1. *genetic*

- Do any members of your family drink more than you think they should?
- Do you sometimes feel scared when some of your family members start drinking?

2. *group*

- Where do you and your friends like to hang out?
- What do you do for fun when you're with your friends?
- When you are at a friend's house, is there usually an adult present?

3. *give*

- Have you been at parties where people your age were drinking or using drugs?
- Do your friends prefer drinking over other activities?
- Do you ever feel "weird" because you are the only one at a party not drinking or using?

4. *get*

- Are you the kind that likes to "live on the edge" and take chances?
- Do you think people seem to have more or less fun when they drink or use drugs?
- Are you curious to find out how alcohol or drugs affect your body?
- Do you just flat-out disapprove of underage drinking and drug use?

5. *great*

- Do you understand how alcohol and drugs work differently on a young, growing brain than on a mature one?
- Do you understand how alcohol and drugs affect your judgment and the way you think?
- Do you know someone whose life has been harmed by alcohol or drugs?

6. *guidance*

- Do you understand why we grown-ups don't want young people drinking alcohol?
- Do you have a good sense of where your parents stand on the issue?
- Do you recognize the consequences that your parents—not to mention school, law enforcement and others—are likely to impose if you choose to drink or use drugs?

What if the answer is “yes”?

If a patient admits to alcohol use, several resources are available. The **CRAFFT** questions can provide an excellent outline for the clinician by assessing the extent of alcohol use, and its impact on the child's life.¹⁸ Two or more positive answers represent a positive screen and warrant further evaluation.

If it is a case of casual alcohol consumption, a brief in-office intervention and subsequent therapy, using techniques such as motivational interviewing and contracting, may be appropriate (for a detailed discussion on office-based assessment and intervention see the fine review by Levy, Vaughan, and Knight).¹⁹ More significant use generally requires specialized evaluation by an expert in chemical dependency assessment. All clinicians should feel comfortable establishing personal guidelines for when further evaluation is appropriate, and should have access to appropriate referral agencies. Most communities have drug and alcohol “hotlines,” and the Web site of the Center for Substance Abuse Treatment of the Substance Abuse and Mental Health Services Administration (SAMHSA, www.csat.samhsa.gov) provides extensive annotated listings of treatment facilities by locality.

Armed and ready

It is the pediatrician's responsibility to give a strong and consistent prevention message to all children and adolescents early and often. The issue should be raised confidentially with all older children and adolescents, and parents should be recruited to be vigilant in observing their child's behavior, and in providing ongoing “no use” messages. The 6Gs can complement these efforts by serving as an easily documented mnemonic for the time-pressed care provider and worried parents (see **Practitioners Guide on pg 00**). □

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THE CRAFFT QUESTIONS

Have you ever ridden in a **CAR** driven by someone (including yourself) who was “high” or had been using alcohol or drugs?

Do you ever use alcohol or drugs to **RELAX**, feel better about yourself, or fit in?

Do you ever use alcohol/drugs while you are by yourself, **ALONE**?

Do family or **FRIENDS** ever tell you that you should cut down on your drinking or drug use?

Do you ever **FORGET** things you did while using alcohol or drugs?

Have you gotten into **TROUBLE** while you were using alcohol or drugs?

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Teaming up with parents

The *6gs* can serve as a useful educational tool to remind parents of their important role in the prevention of tobacco, alcohol, and drug use. Giving parents a copy of the *6gs* handout may encourage them to continue monitoring their children for this important potential problem.

1. *genetic*

- Does your child have any GENETIC predisposition to alcohol or other drug use?
- Is there any inappropriate role modeling to which your child is exposed?
- Do you use alcohol responsibly in your home?

2. *group*

- Do any members of the GROUP he or she hangs out with drink alcohol?
- Know who your child's friends are, and ask if any of them drink alcohol.
- Know where your child hangs out, and whether there is adult supervision.
- Ask what your child does when he or she is with friends, and what it takes for them to have a good time.

3. *give*

- Has your child ever been in the situation where someone offered to GIVE him/her alcohol or encouraged him/her to drink?
- Let your child know that even though alcohol may be available (at home, at someone else's home, at school, at a party, etc.) you expect him/her NOT to drink.
- Encourage your child to avoid being with kids who drink, and get away from the situation if someone is urging him/her to do so.

4. *get*

- Has your child ever been tempted to GET and try alcohol, or does he/she disapprove of drinking by young people?
- Find out if your child has ever thought about trying alcohol or has had even a single sip—or

whether he/she is just totally against it.

- Periodically inquire about other risky behaviors, and let your child know that you expect him/her to make good choices, and not to take chances, especially with alcohol.
- Help your child to develop strategies to be able to say "no" without feeling self-conscious.

5. *great*

- Does your child understand the GREAT dangers associated with underage drinking?
- Remind your child of the great dangers associated with underage drinking—both short-term (accidents, school failure, unwanted pregnancy, etc.) and long-term (health, social, economic, legal).
- Understand and talk with your child about how alcohol affects the young developing brain compared to its effects on adults who drink responsibly.
- Use the media to point out examples of alcohol's dangers—car crashes, drug busts, irresponsible behavior, etc.
- Help dispel the media myths that drinking is glamorous and that drinkers are more likeable, attractive, sexy, and fun than non-drinkers.

6. *guidance*

- Do you provide your child with enough GUIDANCE about drinking?
- Reinforce the fact that underage drinking is dangerous and illegal.
- Regularly remind your child about your hopes and expectations regarding drinking.
- Remind your child that, in fact, most kids don't drink, and that the behavior is unacceptable and will result in significant consequences.

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